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ABSTRACT

The author focuses on various types of nonverbal communication, reactions of both students and teachers to nonverbal communication, and techniques of developing improved communication to support openness in the classroom. An extensive literature review is presented to support the thesis that the essence of communication is nonverbal; if someone says one thing, but shows another through nonverbal gestures and other nonverbal language, then it is the nonverbal that is the "real" communication. Two interaction analysis systems are examined as objective methods for the study, measurement, and evaluation of verbal and nonverbal interaction cues occurring in the classroom. It is posited that through awareness of types of verbal and nonverbal cues, teachers can begin to work more effectively with their own communication skills in the classroom. A bibliography of 48 citations is appended. (MJB)

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OSSC BULLETIN

WHAT TEACHERS SAY MAY NOT BE WHAT STUDENTS HEAR: NON-VERBAL COMMUNICATION IN THE CLASSROOM

by

Kelly Rankin

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PREFACE

Robert Burns wrote it and Sally Burns, my high school English teacher, fixed in my mind;

"O wad some power
The giftie gie us
To see ourselves as ithers see us"

Verbal communication with its intended meaning is often eclipsed by the sender's non-verbal communication. Our posture, expression, inflections, and even the paths we travel most in our office or classroom can defeat our best intentions.

Consistent and coherent communication between student and teacher is of major importance if the education process is to work efficiently. In this month's Bulletin Kelly Rankin focuses on various types of non-verbal communication, reactions of both students and teachers to non-verbal communication and techniques of developing improved communication to support openness in the classroom.

Kenneth A. Erickson
Executive Secretary
Oregon School Study Council

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I. Introduction

Nearly every endeavor in today's educational system is approached through group effort. In contemporary school environments supervisors, teachers, and students frequently work together in problem-solving, feedback, evaluation, and decision-making relationships. Recent supervisory practices stress the improvement of all educational programs; increasing teacher-student communication learning effectiveness is one of the main thrusts toward the improvement of these educational programs (Sergiovanni, 197[illegible]).

Anyone connected with the process of education soon realizes the multitude of human interactions. These interactions take place on every level of the educational hierarchy. Some interactions are open, flexible, and indirect while others are more controlled and direct. There are some interactions within school systems that are extremely sophisticated; others are much less structured. Within the heart of the educational system, the most important interaction is that which takes place between student and teacher. Stolurow and Pehel (1963) stated:

> ....teaching is fundamentally a social process involving communication and interaction between at least two people, a teacher and a student. It is a kind of dialectic in which both serve as teacher and student at different levels. A teacher is not only instructing a student, but is also learning about that student, and using what he learns in making decisions about what to do next in the course of teaching. Similarly, the student is not only learning, but he is providing information to the teacher, which in turn, guides the teacher in the on-going interaction (p. 34).

Positive interaction produces a cohesive classroom group in which teacher and students share responsibility for defining, carrying out, and evaluating the learning experience (Gorman, 1963).

On the other hand, negative interaction that suggests the teacher is rejecting or criticizing the child, may cause the child to feel the teacher is not accepting him. If this rejection or criticism continues, it might begin to affect the child's behavior in a negative manner. His work may show signs of carelessness, he may become defensive, exhibit hostility, or even be labeled as a disciplinary problem.

According to Flanders (1965), "....certain teacher statements inhibit student participation and others encourage it." The teacher restricts student participation when he lectures, gives his own opinions, gives directions or criticisms, or justifies his authority. These are directive or controlling behaviors. The teacher expands student action when he asks questions, clarifies student ideas, uses student ideas or problem-solving, praises and encourages, and accepts student feelings or attitudes. These behaviors exhibit indirect authority, or more permissive teaching.

There recently has been popular interest in "permissive" or "open teaching." Flanders says:

> ....there is a direct relationship between teacher influence and pupil that encourages student participation and constructive pupil attitudes toward the teacher, the school work, and the class activities (p. 50).

The purpose of this bulletin is to examine the effects of communication generally, of non-verbal interaction, and of body language. Through scrutiny of these types of communication, the case for open teaching will be supported.

II. The Effects of Communication

Verbal and non-verbal forms of communication are universal. Teachers certainly use such communication extensively in their interaction with children in the classroom. The manner in which a teacher responds verbally to a child, or to the class, has a definite effect upon the behavior of each child. A positive reaction may indicate understanding of feelings, praise, encouragement, or acceptance, of work that has been well done. Such reactions make the child feel that he is worthy, needed, and is making a worthwhile contribution to the class; they undoubtedly would act as one means of motivation, and they could trigger reactions that would further enhance the child's learning.

A permissive classroom, where student ideas are considered important, can be thought of as a classroom where creativity is encouraged. In contrast, a setting where creative ideas are ignored or not rewarded, where the teacher dominates all action, can be thought of as directive in nature.

Non-verbal communication has been defined as a language without words. Non-verbal cues express a person's feelings very accurately. This type of communication is described by Bier (1974) as "vibes." The communication of well-being, security, affection, and similar feelings causes good "vibes," while messages of hostility, insecurity, and anxiety causes bad "vibes." Satir (1971) adds that a person simultaneously communicates by gestures, facial expression, body posture and movement, tone of voice, and even by way of dress. Too often teachers communicate non-verbally without being aware of how their message is being received by their students.

The essence of human communication is non-verbal; for if someone says one thing, but shows another through non-verbal gestures and other non-verbal language, then it is the non-verbal language which is considered to be the "real communication." Words are only symbols. If they don't jibe with the real meaning, then they are meaningless symbols (Birdwhistle, 1974).

III. Non-Verbal Communication: Forms and Interactions

Kempner (1967) compared verbal and non-verbal interaction and found that verbal communication has many different obvious characteristics such as tone, pitch, volume, and expression. Non-verbal communication is more subtle and silent, but it has a greater expressive quality in some important situations.

Recently, attempts have been made to deal systematically with non-verbal communication. Birdwhistle (unpublished paper) has tried to codify the "language of body expression." He states:

> There is a language of body expression and motion which is ordered and structured as the language we speak. Like the language we speak it is made up of pieces of structure which can be assembled to form orderly sequences of message material which others trained in the same code can translate and respond to in kind (p. 6-7).

The task of non-verbal communication research has been to discover the unwritten rules, established by centuries of communication without words. When the non-verbal signal is understood, its message makes the interpretation of the sender's meaning much more complete and accurate (Dunning, 1971).

Although many articles have been written about non-verbal communication

in the fields of anthropology, sociology, psychology, and psychiatry, it has been relatively neglected in educational research. This is probably because there is no system or language of non-verbal communication, thus it is interpreted idiosyncratically rather than normatively (Schusler, 1971).

Non-verbal communication, called gestural communication, action communication, overt behavior, body language, and motion language, is defined as:

1. a series of symbols that in their proportions and relations are similar to the thing, idea or event for which they stand (Ober, 1970);

2. a systematic study of how human beings communicate through body movement and gesture; and systematic study of the visible, sensible aspects on non-verbal interpersonal communication (Birdwhistle, 1964);

3. supplementary communication signals (Kaesing, 1958);

4. a secondary means of communication (Seals, 1959).

Halpin (1960) defined non-verbal communication as, "....the language of the eyes and hands, of gestures, of time and status symbols, of unconscious slips which betray the very words we use (p. 85)."

Non-verbal communication, described by Galloway (1968), is behavior that conveys meaning without words. It can be symbolic or non-symbolic, spontaneous or managed. It can be expressive, conveying emotion; or it can be informative, transmitting facts.

It can be as specific as a gesture or as general as the atmosphere of a room. It can be either dynamic or static, quick or slow, and/or it can be negative or positive, something that doesn't happen as well as something else that does. Non-verbal communication also can be a combination of all of these.

Knapp (1971) and Koch (1971) identified some of the basic areas and give these examples of non-verbal communication:

Posture: Standing or sitting, posture denotes inner feelings such as weariness, alertness, and relaxation.

Eyes: It is claimed that the eyes are the best non-verbal cue of all. When one's pupil's enlarge, one likes what he/she is looking at; or, in the classroom, the student enthusiastically has the answer to the question asked.

Gestures: Most people think of hand gestures when gestures are mentioned, but there are foot, body, head, and facial gestures.

Skin: Many signals are sent with skin changes such as pallor, perspiration, redness, and blushing.

Proximity: In general, we stay away from those we fear. It also can be related to one's poor self-image.

Tactility: Touching, when it is desired by the student, and when it is a natural act with the teacher, is a most powerful non-verbal act. At times it may be the only way to reach a child.

Voice: At first glance, voice seems to be purely verbal; but interwoven around and among the words are tone, intonation, volume, pitch, hesitations, quivering, silence, etc. Emotions come through, such as anger, fear, or enthusiasm.

Dress: Clothes and jewelry speak volumes about how the wearer sees himself or how he wants the observer to see him.

Breathing: Breathing reflects inner feelings such as excitement.

Time: The use of time, such as being early or late tells the psychologists (or principal) things about a teacher.

Garner (1970) and Wiener (1972) listed the communication process as consisting of five components for attaining the desired result between two

or more human beings: 1) a sender, 2) encoding, 3) message, 4) decoding, and 5) a receiver. Galloway (unpublished paper) identified four ingredients common to human communication: 1) sender, 2) message, 3) channel, and 4) receiver.

Non-verbal is, indeed, the language of sensitivity. It is a knowing smile, an exchanged glance that tells more--much, much more--than words can ever say. It is the frown that makes one feel guilty; the silent anger that emits a tenseness so real that it almost can be touched. It is that obscure, yet emphatic, meaning behind the silence that thunders its message. The non-verbal is so complicated that it can convey an entire attitude, yet so simple that when a head nods or shakes everyone understands. All human relations involve meanings that are more than words, and the non-verbal exposes the truth in these relationships (Galloway, 1971).

Galloway (unpublished paper) found that throughout the course of a teaching day, a teacher may believe that he or she is communicating: "I enjoy this subject"; "Aren't these ideas interesting?" "I like you" when all the time the pupils in the classroom are understanding different meanings. That is, discrepancy exists between what the teacher says and what the teacher expresses. In fact, pupils will gauge the intent or meaning of a teacher's communication by looking at the expressive aspects of his or her behavior as a check on the verbal. If a difference exists between the two expressions, the pupils most often will accept the non-verbal as representing the authentic message.

Birdwhistle (1964, p. 70) classified gestures into three categories.

He called the "pre-kinesics" as those actions not readily observable which usually are preparatory motions of the body that facilitate overt movements. "Micro-kinesics" is concerned with identifying the smallest unit of a gesture. These are called "kines." For instance, Birdwhistle has investigated the kines of the eye movement for Americans, Germans, Japanese, and Bombay Hindus. His research suggested that Americans emphasize the eye more as an instrument of communication than do the other three nationalities studied. "Social kinesics" is related to body movements which are contextual in meaning.

Schusler (1971) pointed out that non-verbal communication, in the form of gestures, positions, and stances, is an inseparable part of the teaching process. It is important enough that awareness of this non-verbal communication should be included in teacher training.

Two active explorers in the area of non-verbal communication are Jorgen Ruesch and Weldon Kees. In their book, Nonverbal Communication (1956), they divided the world of non-verbal into three parts: sign language, action language, and object language. An example of sign language is the use of the thumb gesture by a hitch-hiker. Action language includes all bodily movements that communicate, as when a young man wolfing down his food communicates something about his hunger and perhaps about his upbringing. Object language includes the display of material things, including the human body and its clothing. For Ruesch and Kees, object language includes both the intentional and the unintentional.

In gestural language, Birdwhistle (1952) observed very small body shifts

may make a big difference. He discovered, for instance, that in raising the eyebrows, perhaps twenty-three different positions are seen as having separate meaning. From this study, it appeared that men can produce these different positions at will more easily than women.

Galloway (1971, 1972) found that a facial expression, gesture, posture, glance, vocal pause, or a dozen other actions can express a message. Without uttering a sound a teacher can indicate he dislikes papers written with a dull pencil, likes poetry, or prefers boy students. Without a single word he can convey that he thinks a student is dumb, smart, pretty, ugly, dirty, or unimportant. And the child gets the message! Indeed, teachers can express non-verbal messages but would never have the courage to express them verbally; it is likely they would withdraw if they knew their students had decoded them.

Frequently the only prompting a student needs is to know that someone is aware of his existence, is interested in what he is doing, and is ready to help if needed (Hodge, 1971). Mehragian (1968) has made reference to a formula for explaining the emotional impact of any message: total impact equals seven percent verbal plus thirty-eight percent vocal plus fifty-five percent facial. In effect, he is saying the non-verbal elements of the voice inflection and facial expression act to qualify verbal communication and are primarily indicators of emotion. The result is that the way something is said can be just as important as what is said in terms of the impact it has on the listener.

In an experiment with the human voice, Davitz and Davitz (1961) found that active feelings, such as anger or joy, are portrayed vocally by high

pitch, fast pace, and blaring timbre while passive feelings, such as boredom or despair are typified by low pitch, slow pace and resonant timbre.

Saskin and Kauffman (1961, p. 73) experimented with two simultaneous sets of voice cues: 1) word patterns and 2) the discriminating qualities of the voice itself. It was hypothesized that the quality of the voice was the "smoothly flowing, continuous signal, the carrier," upon which cues to emotional disposition were imposed.

Ekman, Friesen and Soranson (1969, p. 21) conducted studies in New Guinea, Borneo, the United States, Brazil and Japan. Observations of these varied cultures suggested that human beings can inherit in their genetic makeup certain basic physical reactions. Thus, "we are born with elements of non-verbal communication."

In a study of facial expressions, Ekman (1972, p. 23) found that the face appears to be the most skilled non-verbal communicator. Perhaps for that reason the face is the best "non-verbal liar," capable not only of withholding information but of simulating the facial behavior associated with a feeling which the person communicating is in no way experiencing.

Plutchik (1962, p. 124) stated, "that the mouth is most important for happiness, anger and disgust; the eyes for fear and sadness; eyes and mouth and forehead for surprise."

One of the most comprehensive studies of non-verbal communication was conducted by Allport (1967). He began with main categories such as 1) expressive movements, e.g., general body, eyes, head, mouth and limbs; 2) standing, walking, and related activities; 3) sitting and resting; 4) communicating and handwriting. From these main categories he derived more than

300 sub-divisions. For those teachers wishing to pursue the subject further, this study by Allport is highly recommended.

IV. Non-Verbal Communication: Classroom Studies

Miller (unpublished paper) did a unique study on elementary teachers' movements in the classroom. Using the concept of space in a classroom, he found that a teacher who is insecure and anxious tends to establish a "territory" around his desk because it represents a "safe area" -- protecting his role as authority. His travel patterns tend to be around the front of the room using the desk as a base. A teacher who is confident in his teaching shows a travel pattern that includes every place in the classroom, particularly among the students. Miller (1964) added that another teacher's use of space is in the vertical plane. An authoritarian teacher would hardly be expected to lean over to be closer to a pupil to help him, but a confident and enthusiastic teacher might make such a movement frequently. Still, another type of teacher is one who patrols the perimeter of the classroom, i.e., he walks up and down on the outside of the class or down one side only (Miller, unpublished paper).

A revealing study of facial communication by Mehrabian and Ferris (1967) demonstrated that facial expression received approximately three and one-half times the weight given vocal communication when sixty-two students were given information through both channels. The eyes appear to be one of the most effective transmitters of information within the framework of the face.

Harrington (1955) hypothesized that: 1) the frequency with which a teacher smiles is associated with the effectiveness of that teacher; and 2) smiling -- and the positive attitude that often goes with it -- is an important aspect of teacher behavior.

In another study of the face, Grant (1971, p. 3) concluded that the facial muscles of most teachers are in a continual state of motion. Teachers smile, frown, grimace, wrinkle their foreheads, pull up their noses, squint, bite their tongues, make a "long face," grin, smirk, beam, and even wiggle their ears.

Research done by Jecker, Maccoby and Brietrose (1964) investigated students' non-verbal movements in the classroom as a form of feedback to the teacher. They categorized the student non-verbal behavior into seven categories and asked teachers to predict whether a student would answer a question concerning the lesson correctly or incorrectly after these behaviors were observed on video tape. Jecker and his associates concluded that there was a pattern of non-verbal cues related to teacher prediction of comprehension, and that teachers can be trained to recognize and use them as accurate feedback in teaching.

In a study of teacher non-verbal behavior at the elementary school level, teachers differed in their ability and inclination to be encouraging or inhibiting in the communicative contacts with pupils. The evidence suggests that the teachers who were most encouraging tended to reveal their interest in pupils through their listening behavior, their appropriate responsiveness, and their emotional support. Teachers who displayed inhibiting communication behaviors were disinterested in pupil talk, were incon-

sistent in their behavior responses to pupils, and were more likely to express disapproval in their non-verbal contact with pupils (Galloway, 1962).

In another study by Galloway (1966), to check on the fidelity of verbal statements, pupils read the meanings behind non-verbal expressions and quite frequently placed greater score in the validity of the character of the non-verbal. Indeed, among many pupils the non-verbal was heavily relied upon to reveal the authenticity of a message communicated by a teacher. For example, a teacher verbally may utter an approval of some seatwork a pupil is doing, yet the pupil may pick up cues that suggest disapproval. Although a teacher verbally may insist with most persuasive language that he or she holds a certain belief, a pupil continually will check the teacher's non-verbal expression to see if a contradtiction can be detected.

"Silent cues," stated Galloway (1972, ERIC), "signal a change or provide the continuity of any interpersonal relationship." These cues, whether by face, eyes, or gesture, can be the primary means of expressing attitudes of intimacy, aloofness, concern, or indifference. Teacher attitudes can be inferred from the way the teachers look at students or away from them. Special non-verbal cues can exist between a teacher and some students, implying favorable relationships. The very absence of these same cues can communicate "unfavorableness" between the same teacher and other students.

Pancrazio (unpublished paper) aptly noted that classroom interaction generally is seen as a desirable activity in reaching cognitive and social goals. Teachers may encourage or discourage relevant interaction. Similar to any other educational goal, its attainment can be influenced by the teacher's verbal and non-verbal behavior. As receivers of communication,

pupils further communicate their responses and reactions to the messages of the teacher. Classroom interaction is influenced by how messages are sent and received, and by how feedback is expressed.

The cognitive influence of non-verbal behaviors may be seen in the work of Rosenshine (unpublished paper) and Balzer (1969). Rosenshine examined behavior predictions of effectiveness by teachers. He reported the use of gestures and movement, which are non-verbal, as significantly affecting the explanations given by teachers. This finding was interpreted to mean that gestures and movement by the teacher may have the effect of arousing attention.

Balzer (1969) studied the total classroom behaviors of biology teachers that seemed to influence learning. He found that non-verbal behaviors acted to enhance the verbal communication and were seen as reinforcing verbal statements.

A later study by Torrance (1960) exemplifies the social influences of non-verbal behaviors. In a study designed to assess pupil reaction to teachers' verbal statements, Torrance found that when teachers' verbalizations were in conflict with their non-verbal behaviors, pupils were influenced by the non-verbal. Torrance stated:

> ....that even though teachers say the "right words" and pupils say that they perceive their teachers as having favorable attitudes, the teachers' real attitude is likely to "show through" and to affect behavior and emotional reactions (p. 98).

When teachers say one thing but actually mean another, pupils are more likely to pay attention to how the teacher is behaving, rather than to what the teacher is saying. It seems likely, then, that the attaining of educational goals, either cognitive or social, may be influenced by the non-verbal behavior of teachers and pupils.

V. Summary

The quantity and effect of non-verbal stimuli shows the importance of non-verbal communication to the total process of communication. Non-verbal communication often is referred to as unspoken (and unwritten) messages. People communicate with their body gestures, messages communicate through their vocal characteristics, and other non-verbal cues occur through such things as positions, stances, and the way one dresses. Non-verbal communication is responsible for communicating feelings and attitudes, but should only be interpreted in the context of the total communication situation.

The study of the body, its behavior, and appearance, has been pioneered by Birdwhistle and his science called "Kinesics." Much of the research done on the physical behavior of the body can be conveniently grouped into three areas: the face, posture and gesture, and touching.

The human voice can be studied by examining such descriptions as pitch, tone, volume, rate, resonance, and rhythm. Examination of the voice has shown that listeners are better able to predict the true nature and feeling being exhibited through non-verbal indications rather than just through words.

After several adaptions of instruments relating to verbal behavior, investigators realized that the non-verbal communication within a classroom had been relatively neglected. Yet, it is as important as verbal behavior, if not more so. Therefore, it becomes evident that in order to assess

teacher behavior more adequately, both the verbal and non-verbal aspects need full consideration.

One of the most objective ways to evaluate and measure verbal and non-verbal interaction cues that occur in the classroom is through interaction analysis. The Interaction Analysis System developed by Flanders (FIAS) concentrates specifically on the interactions between those in the classroom environment--the teachers, and the pupils. The system is designed to categorize verbal interaction. Through a system of tallying verbal cues, these data can be transferred onto a matrix to give a percentage of what occured during a certain lesson.

The Rankin Interaction Analysis System (RIAS) (1975, Dissertation) measures both verbal and non-verbal interaction primarily in the area of elementary physical education. This instrument was developed to simplify for the recorder basic areas of interaction that occur in a lesson taught in physical education. It easily could be applied to the classroom environment to measure how much verbal and non-verbal communication exists.

Through awareness of types of verbal and non-verbal cues, teachers can begin to work more effectively with their own communication skills in the classroom. Not only will they be able to work with their own skills, but, by awareness of the pupil's communication cues, especially non-verbal ones, they will understand the pupils better and, thus, will be able to relate to them more realistically.

The above-mentioned systems for evaluating and measuring verbal and non-verbal cues may be helpful in determining the quality of communication in any school's classrooms. It is hoped that, through better awareness of

of communication (particularily the non-verbal--which usually reveals the true feelings being expressed--), the case for "open teaching" or openness in the classroom is supported.

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